

IN THE CLAIMS

Claims 6, 10 and 11 are hereby canceled.

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An adaptive equalizer comprising:
 - a decision device producing a decision device output;
 - a decision feedback equalizer coupled to the decision device, the decision feedback equalizer producing a decision feedback output;
 - an FIR filter coupled to the decision device; and
 - a trellis decoder coupled to the decision device, the trellis decoder producing a reliability output and a decoded output;

wherein an error signal is generated by subtracting the decision feedback output from the decision device output, the error signal being used to update coefficients of the taps of the FIR filter and the decision feedback equalizer; and

wherein a magnitude of the change to the coefficients is selected based at least in part the reliability output of the trellis decoder.
2. (Original) The adaptive equalizer of claim 1, wherein the decision device is a slicer.
3. (Original) The adaptive equalizer of claim 1, wherein the trellis decoder is a Viterbi decoder.

4. (Original) The adaptive equalizer of claim 3, wherein the reliability output is determined by generating a soft output from each decoding stage of the Viterbi decoder, each soft output being equal to a difference between an accumulated metric of a survive path and a deleted path for the decoding stage, the soft output of a final decoding stage being used as the reliability output.
5. (Original) The adaptive equalizer of claim 4, wherein the decision device is a slicer.
6. (Canceled).
7. (Original) An adaptive equalizer comprising:
 - a decision device;
 - an FIR filter coupled to the decision device;
 - a decision feedback equalizer coupled to the decision device, the decision feedback equalizer producing a decision feedback output;
 - a trellis decoder coupled to the decision device, the trellis decoder producing a reliability output and a decoded output;
 - wherein the error signal is generated by delaying the decision feedback output and subtracting it from the decoded output; and
 - wherein a magnitude of change in the coefficients is selected based at least in part upon the reliability output.

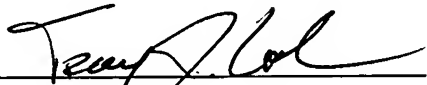
8. (Original) The adaptive equalizer of claim 7, wherein the decision device is a slicer.

9. (Original) The adaptive equalizer of claim 7, wherein the trellis decoder is a Viterbi decoder.

10-11. (Canceled).

No fees are believed to be due, however, should any fees be deemed required, the Commissioner is authorized to charge such fees to Deposit Account No. 23-3030, but is not to include any payment of issue fees.

Respectfully submitted,

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